

nGenuity™ Patient Monitor

Improve patient outcomes with a comprehensive, user-configurable patient monitoring system covering the needs of multiple departments within hospitals and outpatient facilities.

Custom Configurations

- STANDARD: ECG, ComfortCuff™ NIBP, DOX™ SpO₂, HR, Temperature, Respiration, and Nurse Call interface connection.
- OPTIONAL: Arrhythmia and ST analysis, printer.

Features

- Easy-to-read 10.4" active color TFT display.
- Easy to learn, easy to use – simplified menus and dedicated function keys.
- Versatile mounting options.



Focus on your patients, not your monitor. The nGenuity™ 8100E(P) patient monitor is the perfect choice for busy departments demanding accurate, reliable performance.

The 8100E(P) Series monitor can monitor adult and pediatric patients in virtually every department. The innovative user interface features simplified menus and dedicated function keys for timely set-ups. The big, bright display with large numerics can easily be seen, even from across the room.

The nGenuity 8100E(P) patient monitor mounts quickly and easily to walls and rollstands.

Technical Specifications

ECG

| | |
|----------------------------|---|
| Number of Leads: | 3- or 5-Lead |
| Lead View: | User-selectable; I, II, III, aVR, aVL, aVF, V (5-Lead); I, II, or III (3-Lead) |
| Gain Selection: | x0.5, x1, x2, and x4 |
| Frequency Response: | Diagnostic: 0.05 to 100 Hz (-3dB); Monitor: 0.5 to 40 Hz (-3dB); ST: 0.05 to 40 Hz (-3dB) |
| Electrosurgery Protection: | Yes |
| Defibrillator Protection: | Yes |
| Pacer Detection/Rejection: | Yes |
| ST Accuracy: | ±0.2 mm or ±5% of reading, whichever is greater, over heart range of 30 to 120 bpm |
| ST Range: | -6.0 to 6.0 mm |

Pulse Oximetry

| | |
|-------------|---|
| Range: | 1% to 99% |
| Resolution: | 1% |
| Accuracy: | 70% to 99% range: ±2% 50% to 69% range: ±3% <50%: unspecified |
| Method: | Dual wavelength |

Non-Invasive Blood Pressure

| | |
|-------------------------------|---|
| Technique: | Oscillometric during inflation |
| Inflation Pressure Range: | Adult: 30 to 300 mmHg Pediatric: 30 to 300 mmHg Neonate: 20 to 150 mmHg |
| Measurement Cycle: | < 40 sec. average |
| Automatic Measurement Cycles: | 2, 3, 5, 10, 15, 30 minutes; 1, 2, 4, hour (User Selectable Cycle Times) |
| Stat Mode: | 5 minutes of continuous readings |
| Resolution: | 1 mmHg |
| Transducer Accuracy: | ±2 mmHg or ±2%, whichever is greater |

Heart (Pulse) Rate

| | |
|-----------|---|
| Source: | User selectable: Smart, ECG, Pleth, NIBP |
| Range: | 20 to 300 bpm (30-240 bpm, NIBP) |
| Accuracy: | ±1 bpm or 1% (ECG), whichever is greater ±2 bpm or 2% (NIBP), whichever is greater |

Temperature

| | |
|---------------------|---------------------------------------|
| Channels: | 1 |
| Range, Accuracy: | 68° to 113° F (20° to 45° C): ±0.1° C |
| Display Resolution: | ±0.1° C |
| Probe: | YSI-400 and YSI-700 series |

Respiration

| | |
|-------------|--|
| Rate: | 60 to 150 breaths/min |
| Resolution: | 1 breath/min |
| Accuracy: | ±1% or ±1 breath/min, whichever is greater |
| Source: | ECG-TTI |

Alarms

| | |
|-------------|-----------------------------|
| Indication: | Audible; visual |
| Silence: | Yes; 2 minutes or permanent |

Trends

| | |
|----------|--|
| Memory: | 24 hours at 30 second intervals with an NIBP reading every 3 minutes |
| Display: | Tabular, Graphical |

Display

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|-----------------|--|
| Screen: | 10.4" active color TFT |
| Resolution: | 640 x 480 pixels |
| Waveforms: | 6, maximum |
| Waveform Types: | ECG leads, I, II, III, aVR, aVL, aVF, V; Respiration; Pleth; ST Histograms |
| Sweep Speed: | 6.25, 12.5, 25, 50 mm/sec |
| Languages: | English, French, German, Italian, Portuguese, Spanish, Russian, Chinese |

Controls

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|--------------|--------------------------------|
| Keys: | 9; membrane-activated |
| Rotary Knob: | Push and rotate; 24 steps/turn |

System Outputs

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|-------------|--|
| Com Ports: | RS 232-compatible; DB9 (Com 1); Mini-DIN 8 (Com 2) |
| Nurse Call: | Contact switch; 3.5 mm stereo phone jack, 14 mm length BNC connector |
| Defib/Sync: | High density D-sub 15-pin |
| Video Port: | |

Printer

| | |
|--------------|----------------------|
| Type: | Thermal line printer |
| Paper Speed: | 12.5, 25, 50 mm/sec |

Physical Properties

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|---------|---|
| Weight: | 13.2 lb; 6 kg |
| Size: | 11" (H) x 13" (W) x 10.3" (D); 28 cm (H) x 33 cm (W) x 26.2 cm (D) |

Power Requirements

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|--------------------|---|
| Voltage: | 100, 120, 220, 240 VAC; 50/60 Hz |
| Power Consumption: | 35 W, typical |
| Battery: | 1 sealed lead acid; life: 3 hrs, typical; recharge time: 4.5 hrs |

Environmental

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|------------------------|-----------------------------|
| Operating Temperature: | 59° to 95° F; 15° to 35° C |
| Storage Temperature: | 23° to 122° F; -5° to 50° C |
| Operating Humidity: | 15% to 90%, noncondensing |

Classification

| | |
|-----------------------------|------------------------------|
| Medical Device: | Class II Equipment (IIb EU) |
| Electrical Protection: | Class I Equipment |
| Degree of Protection: | Type CF, Defibrillator-proof |
| Protection Against Ingress: | IPX1 |



Quality systems registered to ISO 13485 and CE marking per Annex II, Clause 3 of Council Directive No. 93/42/EEC concerning medical devices.

Configurations Available

| | |
|------------------|---------------------|
| 8100EP | printer |
| 8100E | no printer |
| 8100EP-ST | printer, with ST |
| 8100E-ST | no printer, with ST |